|   | Application No.   | Applicant(s)   |
|---|---|--|
| Notice of Allowability  | 10/828,267  | KUNITSUGU ET AL.   |
|   | Examiner  | Art Unit   |
|   | Leith A. Al-Nazer   | 2821   |
| The MAILING DATE of this communication appear<br>All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) | ars on the cover sheet with<br>OR REMAINS) CLOSED in<br>or other appropriate commun | the correspondence address this application. If not included nication will be mailed in due course. THIS |
| NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIC of the Office or upon petition by the applicant. See 37 CFR 1.313   |   | bject to withdrawal from issue at the initiative   |
| 1. $\boxtimes$ This communication is responsive to <u>amendment filed on 2</u>  | 1 December 2005.  |  |
| 2. The allowed claim(s) is/are <u>3-7</u> .   |   |  |
| <ul><li>3.   Acknowledgment is made of a claim for foreign priority under a)   All b)   Some* c)   None of the:</li></ul>   | der 35 U.S.C. § 119(a)-(d) or   | (f).   |
| <ol> <li>Certified copies of the priority documents have</li> </ol>   |   |  |
| 2. Certified copies of the priority documents have  | • •   |  |
| 3. Copies of the certified copies of the priority doc   | uments have been received   | in this national stage application from the  |
| International Bureau (PCT Rule 17.2(a)).  |   |  |
| * Certified copies not received:  |   |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.             |   | reply complying with the requirements  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give   |   |  |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") must   | t be submitted.   |  |
| (a) ☐ including changes required by the Notice of Draftsperso   | on's Patent Drawing Review  | ( PTO-948) attached  |
| 1) hereto or 2) to Paper No./Mail Date  |   |  |
| (b) including changes required by the attached Examiner's<br>Paper No./Mail Date  | Amendment / Comment or i  | า the Office action of   |
| Identifying indicia such as the application number (see 37 CFR 1.6 each sheet. Replacement sheet(s) should be labeled as such in th   |   |  |
| 6. DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F   | it of BIOLOGICAL MATE<br>FOR THE DEPOSIT OF BIOL                                    | RIAL must be submitted. Note the OGICAL MATERIAL.  |
|   |   |  |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892)   | 5 🗆 Notice of Info  | rmal Patent Application (PTO-152)  |
| 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  | 6. ☐ Interview Sur  | ,,   |
|   | Paper No./M   | lail Date  |
| <ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/08<br/>Paper No./Mail Date <u>05 October 2005</u></li> </ol>   | B), 7. ☐ Examiner's A   | mendment/Comment   |
| 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material  | 8. 🗌 Examiner's S   | tatement of Reasons for Allowance  |
| -   | 9. 🗌 Other  | Taulto   |
|   |   | TAN HO<br>PRIMARY EXAMINER   |
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## **DETAILED ACTION**

## Allowable Subject Matter

1. Claims 3-7 are allowed.

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2. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest one or more of the limitations found in independent claims 3 and 4. U.S. Patent No. 6,487,227 to Kuramachi and U.S. Patent No. 6,804,282 to Shigihara et al. both teach similar systems to that of the present application. However, with respect to independent claim 3, Kuramachi and Shigihara, as well as the other prior art of record, fail to teach or suggest a dielectric multilayer film on the rear end face and having a second reflectivity, higher than the first reflectivity, and at least 40% at the characteristic wavelength, wherein the dielectric multilayer film includes a film of aluminum oxide in contact with the rear end face, a film of silicon oxide, and a film of tantalum oxide. With respect to independent claim 4, the prior art of record fails to teach or suggest a dielectric multilayer film on the rear end face and having a second reflectivity, higher then the first reflectivity and at least 40% at the characteristic wavelength, wherein the dielectric multilayer film has, in sequence, from the layer in contact with the rear end face, at least three paired layers, and a final film of aluminum oxide, and each of the paired layers includes an aluminum oxide film, and a tantalum oxide film.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Communication Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leith A. Al-Nazer whose telephone number is 571-272-1938. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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TAN HO PRIMARY EXAMINER

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